

LISTing Newsletter

Newsletter of the
Long Island Sinclair\Timex
Users Group

.....
Incorporating NYTSE

September 1988

Next Meeting / Swap Meet

October 16, 1988 1:00 PM

Harvey Rait's House

L.I.S.T.

5 Peri Lane

Valley Stream, NY 11581



TO:

Don Lambert
3310 Clover Dr. S
Cedar Rapids, IA
52404

FIRST CLASS MAIL
DATE MEETING NOTICE
Please DON'T delay!

LISTing Listing

Please send submissions to:

LIST, Harvey Rait

5 Peri Lane

Valley Stream, NY 11581

PLEASE NOTE THE NEW LIST ADDRESS

TO OUR SUBSCRIBERS:

Due to circumstances beyond our control, this edition of LISTING was sent out late. The editor wishes to extend his apologies for this inconvenience. The executive staff of L.I.S.T. will do everything in its power to avoid such delays in future editions.

COMING EVENTS:

October 09, 1988; Computer Show & P.C. Flea Market at Grand Royal Hotel, Hempstead, N.Y.
October 16, 1988; L.I.S.T. Meeting / Swap Meet

Meeting Minutes September 18, 1988

Before the meeting, the club members were treated to a demonstration of COMPUSERVE. The demonstration was given by Bob Molloy, using the TS2068 computer and TS2050 Modem. The demonstration was extremely informative in showing how the computer can be used to access outside telecommunications sources and the various types of services these sources can offer the computer user.

Harvey Rait was elected as the new president of L.I.S.T., CONGRATULATIONS HARVEY

Steve Kaye informed us that ELECTRONIC EXPRESS, Dallas, Texas is advertising a Sinclair Professional Series Computer which is I.B.M. compatible. Steve will contact Electronic Express to get more information on this new machine.

Club Mail

A letter was received from Mr. Nazir Pashtoon during the summer. Nazir, a former member of L.I.S.T., is respected as a Sinclair hardware expert. His letter is enclosed on page #3.

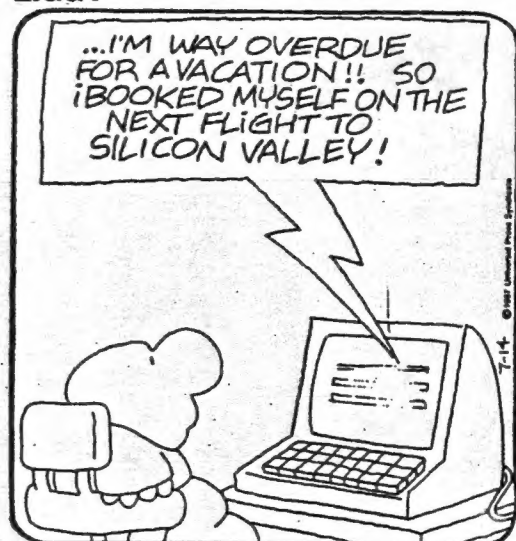
A letter was received from Mr. Hal Bellinson, regarding the addition of a reset switch to the TS2068. His letter is enclosed on page #4.

Finally, a letter was received from Mr. John McMichael, introducing an interface and software that would allow an unmodified Commodore 1520 four-color printer / plotter to be used with a TS2068 computer. His letter is enclosed on pages #5, 6 & 7. By coincidence, during the summer, Bob Gilder acquired the interface kit, and a Commodore 1520. Bob brought the completed interface and the printer / plotter to the meeting and gave us a demonstration. The printing and graphics on page #8 is the results of the demonstration. Unfortunately, the reproduction on page #8 does not show the striking red, green, and blue of lettering. According to Bob, the kit is easy to build, taking him less than 1/2 hour to do so. The demonstration shown is on the software tape. Finally, Bob informed us that the Commodore 1520 is being sold at the close-out price of \$29.95 at Toys-R-Us.

A Final Word

My name is Fred Stern, and I have been the reporter / editor for this edition of LISTING. L.I.S.T. is your club, and can only exist with your support. Come to the meetings, contribute your expertise in hardware and software, or learn something new. If you can't come to a meeting, write an article for this YOUR NEWS LETTER. Whether you are a novice or a PRO, your questions and comments can be an education for us all.

ZIGGY



Dear Harvey:

Greetings. Concerning software exchange between LIST and the Chicago Group, the person in charge here

is Gary Lessenberry
~~188~~ 1885A Yorktown Ave.

Great Lakes, IL 60088

Contact him. By the way you are in luck, He also has the OLIGER DRIVE system.

With your superb hospitality, no wonder you are entertaining 16 to 25 ~~meeting~~ people each meeting. I hope the guys are footing the

expenses.

For your info. Cedric Bastiaens passed away Apr. 30.

I also informed Joe Newman.

His family address, if any one is interested, is

The Cedric Bastiaens^{family}
3 Cassie Ct.

Mt. Sinai, NY 11766

Finally, Give my regards to everybody.

Yours.
Nazir

HAL BELLINSON *****
***** 36 Clinton Avenue Troy N.Y. 12180

8 August 1988

LIST, Harvey Rait
5 Peri Lane
Valley Stream NY 11581

Dear Harvey,

You might want to use this as a supplement to the item
by Charlie Urban in the May issue.

I have the Zebra disc. I have the same need as Urban to
reset the 2068 frequently, and I solved the problem in
essentially the same manner. But it is not necessary to open
the computer and perform internal soldering.

The two points to which the push-button is connected
are available on the connector in back of the 2068. RESET is
pin 24A; ground is pin 7B.

Hal

John McMichael
1710 Palmer Drive
Laramie, WY 82070
August 15, 1988

Dear T/S User Group:

Greetings from Wyoming! Yes, believe it or not, Timex/Sinclair computers are alive and well even here in Wyoming, USA.

I'm very excited to announce that I have developed a new and unique line of hardware and software to expand the usefulness and enjoyment of T/S 2068 computing.

Approximately one year ago, I developed an interface and software that would allow an unmodified COMMODORE 1520 four-color printer/plotter to be used with a 2068 computer. At that time the 1520 was being abandoned by COMMODORE and 1520's could be purchased for a fraction of their original cost from several sources. Needless to say, the stocks of inexpensive "dumped" 1520's were very quickly depleted, making the 1520 a somewhat difficult item to find today.

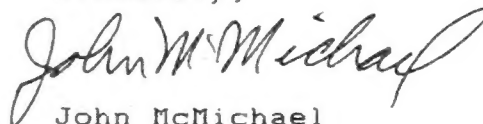
The disappearance of the 1520 left me wondering what to do with the many unsold 1520 I/F boards I had. After much thought, I decided to try the I/F with an OKIMATE 20 printer equiped with a COMMODORE 64/128 Plug 'n Print cartridge....if this new marriage worked, the 2068 would be able to do something never before possible - produce full color screen dumps.

Suprisingly, everything fell together in an unusually smooth fashion. The old 1520 I/F board could be used "as is" with the OKIMATE 20 and COMMODORE 64/128 Plug 'n Print cartridge, and software was quickly written to allow the 2068 to produce color and black & white screen dumps, do word-processing (using Customized MScript), and to LLIST / LPRINT with the OKIMATE 20.

I've inclosed additional information regarding the new 2068/OKIMATE 20 connection. I would very much appreciate it if this information could be passed around at your next club meeting and/or posted on your club bulletin board. Also, if any of your members are interested in color plotting with the 2068 and are successful at finding a 1520 (I am always attempting to locate new and used 1520's for resale), please have them write me for details and a sample color plot.

Thanks for all your help!

Sincerely,



John McMichael

For the **TIMEX 2068** and **OKIMATE 20**

Color Copy

NEW for your 2068!!

DEAR FELLOW T/S 2068 USER:

The amazing versatility of OKIDATA's OKIMATE 20 printer is now available to the T/S 2068 user!! A simple COMMODORE serial port emulator circuit, originally developed and sold as an interface between a T/S 2068 and COMMODORE 1520 4-color printer/plotter has recently been tested and found to work as an interface to an OKIMATE 20 using a COMMODORE 64/128 Plug 'n Print cartridge.

Software for the OKIMATE 20 I/F has been written for FULL COLOR and black & white screen dumps, to enable Customized MScript versions 5 or 5.2 to print to the OKIMATE 20, and to facilitate LPRINTing and BASIC program LLISTing.

The OKIMATE 20 and COMMODORE 64/128 Plug 'n Print cartridge can be purchased from many discount computer suppliers. Also, second hand units can be found at many stores that sell used computer equipment. I bought mine used w/cartridge for \$89!

HARDWARE FOR THE 2068/OKIMATE 20

----- OKIMATE 20 Specifications: -----

- > Uses 5-10 inch wide plain or thermal paper (tractor/friction feed) or acetate transparencies (for overhead projectors).
- > Prints in six type sizes - up to 136 characters per line.
- > Prints in Near Letter Quality, draft, underline, super/sub script, italics, and reverse (white printing on black).
- SEE OKIMATE 20 PRINT SAMPLE BELOW
- > Can do 7 or 24 pin color and black & white graphics.
- > Color and black ribbons are available through many dealers.
- > OKIMATE 20 is compact requiring approx. the same desk space as a 2068 (not counting a stack or roll of paper behind it).

----- I/F Board Specifications: -----

- > Full on-board decoding. (port 63 is used)
- > Only 4 ICs, 1 cap., a 6-pin DIN plug/4-cond. cable required.
- > High quality circuit board features plated-through holes.
- > May be plugged directly into an expansion board or, for a small additional cost, a keyed edge connector will be supplied for alternate direct connection to the 2068's rear bus.

OKIMATE 20 PRINT STYLE SAMPLE

This is an example of PICA (10 CPI/80 CPL) printing.

This is an example of ELITE (12 CPI/96 CPL) printing.

This is an example of FINE (17 CPI/132 CPL) printing.

This is an example of DOUBLE WIDTH PICA.

This is an example of DOUBLE WIDTH ELITE.

This is an example of DOUBLE WIDTH FINE.

This is an example of PICA ITALIC printing.

This is an example of ELITE ITALIC printing.

This is an example of FINE ITALIC printing.

This is an example of UNDERLINED print.

This is an example of speedy DRAFT print.

This is an example of NEAR LETTER QUALITY print.

~~This is an example of NEAR LETTER QUALITY print.~~

SUPERScript examples: OKIDATA^T, e=mc² SUBScript example: H₂O

..... COLOR COPY

```

/ ----- A color and b/w screen dump utility. ----- \
/ > Selectable FULL COLOR or black & white screen dumps. \
/ > Selectable dump size: 1.6 X 1.25 ; 3.25 X 2.5 inches. \
/ > Variable horizontal positioning of the screen copy. \
/ > Accepts any SCREEN$ CODE file for copying. \
/ > Will make multiple copies. \
/ > Copies the entire 24 line screen. \
/ > Complete user notes included. \

```

As Sir Clive Sinclair says in the picture to the right, -FULL COLOR- screen\$ hardcopies are finally a reality for T/S 2068 users! The COLOR COPY program was used to copy Sir Clive's likeness in black & white for use with this ad. Unfortunately, the time that would be required and cumulative print head wear and tear prohibit me from mass producing color copy samples to send out with every brochure. If you would like a color copy sample, please send \$1 (or four 25 cent stamps) to help cover expenses.

..... CMS/OKI 20

```

/ ----- A compatibility patch for CMS V5 or V5.2 ----- \
/ > Designed to be used with Customized Mscript V5 / V5.2. \
/ > Quickly and easily "patched" into CMS. \
/ > Provides for word processing with the OKIMATE 20. \
/ > The cover page print sample was done with CMS/OKI 20. \
/ > Complete "patch" procedure and user notes included. \

```



..... OKI-DRIVER

```

/ ----- A bi-memory LPRINT / LLIST a.c. driver. ----- \
/ > Compact machine code driver is less than 500 bytes, & \
/ resides immediately below the User Defined Graphics. \
/ > A single user call selects LPRINTing or LLISTing. \
/ > AT, TAB, & the "," control are all supported. \
/ > Concurrent use of a 2040 printer is possible. \
/ > Complete user notes included. \

```

----- ORDER YOURS NOW!! -----

NAME: _____

ADDRESS: _____

CITY/STATE/ZIP: _____

QUANTITY	DESCRIPTION	PRICE EACH	TOTAL
	Bare Bd w/parts list	\$14.95 ppd	
	Bare Board and Parts	\$20.95 ppd	
	Assembled and Tested	\$30.95 ppd	
	Keyed Edge Connector-If purchased with hardware	\$4.95 ppd	
	COLOR COPY utility	\$8.95 ppd	
	CMS/OKI 20 Patch kit	\$8.95 ppd	
	OKI-DRIVER utility	\$8.95 ppd	
	COLOR COPY dump sample	\$1.00 ppd	

(Pre-paid orders only please.) TOTAL ENCLOSED>>

SEND ALL ORDERS/INQUIRES TO:

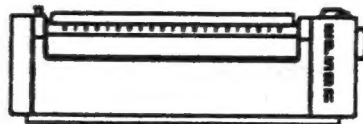
John McMichael, 1710 Palmer Dr., Laramie, WY 82070

4 Times Copy Utility For Epson

Full Page Sideways Enlarged Screen Copy

By Keith Skapinski

7 Atkinson Lane
Coram, NY 11727



The following program will allow you to produce a high quality full page screen copy to an Epson or Epson compatible printer using an Aerco (or Oliger) printer interface.

The program works by reading the screen using the POINT command, then printing the screen to the printer sideways and four times larger.

The BASIC program (figure 1) is fairly slow but can be compiled with TiMachine Basic Compiler to speed it up considerably. If you do not have TiMachine, you can install the code (figure 2) into memory at address 64676. The length of the code is only 674 bytes.

****Use: RANDOMIZE USR 64676..to run compiled CODE,or POKED in code.**

(Figure 1)

```
10 REM Epson 4X Sideways Copy
20 REM By Keith Skapinski
30 REM
40 REM -For best results,
  compile with TiMachine. Use...
  "I INT i,j,t"
50 OUT 127,27: GO SUB 240: OUT
127,CODE "A": GO SUB 240: OUT 1
27,8: GO SUB 240
60 FOR i=255 TO 0 STEP -4
70 FOR t=1 TO 12: OUT 127,32:
GO SUB 240: NEXT t
80 OUT 127,27: GO SUB 240: OUT
127,CODE "K": GO SUB 240: OUT 1
27,96: GO SUB 240: OUT 127,1: GO
SUB 240
90 FOR j=175 TO 0 STEP -1
100 LET t=0
110 IF POINT (i,j) THEN LET t=t
+192
```

```
120 IF POINT (i-1,j) THEN LET t
=t+48
130 IF POINT (i-2,j) THEN LET t
=t+12
140 IF POINT (i-3,j) THEN LET t
=t+3
150 OUT 127,t: GO SUB 240
160 IF INKEY#="" THEN GO TO 25
0
170 OUT 127,t: GO SUB 240
180 NEXT j
190 OUT 127,10: GO SUB 240
200 NEXT i
210 OUT 127,27: GO SUB 240: OUT
127,CODE "2": GO SUB 240
220 LPRINT
230 GO TO 250
240 IF IN 127<>109 AND IN 127<>
237 THEN GO TO 240
250 STOP
```

205 14 255 33 70 255 34 108 92 33 127 0 229 33 27 0 193 237 105 205 136 254 33 127 0 229 33 65 0 193 237 105 205 136
254 33 127 0 229 33 8 0 193 237 105 205 136 254 33 255 0 34 70 255 229 33 0 0 34 76 255 33 252 255 34 78 255 203
124 225 195 79 254 33 1 0 34 74 255 229 33 12 0 34 84 255 225 195 18 253 33 127 0 229 33 32 0 193 237 105 205 136
254 42 74 255 35 34 74 255 237 91 84 255 235 167 237 82 226 32 253 124 238 128 242 254 252 33 127 0 229 33 27 0 193 237
105 205 136 254 33 127 0 229 33 75 0 193 237 105 205 136 254 33 127 0 229 33 96 0 193 237 105 205 136 254 33 127 0 229
33 1 0 193 237 105 205 136 254 33 175 0 34 72 255 229 33 0 0 34 80 255 33 255 255 34 82 255 203 124 225 195 34 254
33 0 0 34 74 255 42 70 255 229 42 72 255 193 69 205 55 255 124 181 202 145 253 42 74 255 17 192 0 25 34 74 255 42
70 255 43 229 42 72 255 193 69 205 55 255 124 181 202 173 253 42 74 255 17 48 0 25 34 74 255 42 70 255 43 43 229 42
72 255 193 69 205 55 255 124 181 202 202 253 42 74 255 17 12 0 25 34 74 255 42 70 255 43 43 43 229 42 72 255 193 69
205 55 255 124 181 202 231 253 42 74 255 35 35 35 34 74 255 33 127 0 229 42 74 255 193 237 105 205 136 254 205 24 255 205
2 255 1 0 32 205 196 254 124 181 194 178 254 205 78 19 33 127 0 229 42 74 255 193 237 105 205 136 254 42 72 255 237 91
82 255 25 203 122 34 72 255 237 91 80 255 32 1 235 167 237 82 226 50 254 124 238 128 242 112 253 33 127 0 229 33 10 0
193 237 105 205 136 254 42 70 255 237 91 78 255 25 203 122 34 70 255 237 91 76 255 32 1 235 167 237 82 226 95 254 124 238
128 242 237 252 33 127 0 229 33 27 0 193 237 105 205 136 254 33 127 0 229 33 50 0 193 237 105 205 136 254 205 19 255 62
13 215 205 14 255 195 178 254 33 127 0 68 77 237 104 38 0 17 109 0 205 188 254 229 33 127 0 68 77 237 104 38 0 17
237 0 205 188 254 124 181 209 40 1 235 124 181 194 136 254 33 22 43 217 201 33 22 43 217 201 175 237 82 103 111 200 44 201
62 7 15 245 205 175 47 213 197 205 175 47 225 124 181 227 120 32 11 177 193 40 4 241 63 24 22 241 24 19 177 40 13 26
150 56 9 32 237 11 19 35 227 43 24 223 193 241 167 33 0 0 48 1 44 15 216 125 238 1 111 201 225 78 35 70 35 84
93 9 229 195 116 46 62 2 195 48 18 62 3 195 48 18 205 176 2 14 0 32 19 205 92 3 48 14 21 95 205 113 3 245
1 1 0 247 241 18 14 1 6 0 195 116 46 205 3 38 71 4 126 7 16 253 230 1 38 0 111 201 0 0 0 0 0 0

(Figure 2) - Numbers are read from left to right, top to bottom. (205,14,etc.)

SQUASHED



SQUASHED is an intriguing version of the Break Out game for an expanded T/S1000/ZX81. Imagine a squash court full of milk bottles and a ball made of solid steel. Your job is to break the bottles by moving the bat with keys S and Z.

A running score is kept and the game ends when you destroy all the targets or lose your allocated three balls.

```

20 REM (C) PER GRONBORG, 1982
30 REM RESET HI-SCORE BY ENTERING "POKE 16514,0"
40 LET BALLS=3
45 LET HI=PEEK 16514
50 LET BT=9
55 LET BB=11
75 LET Y1=SGN (RND-0.5)
80 LET K=0
85 LET B=0
90 LET P=PEEK 16396 + 256 * PEEK 16397 + 1
100 FAST
105 CLS
110 FOR T=0 TO 30
120 PRINT AT 0,T;"■"
130 PRINT AT 20,T;"■"
140 IF T < 20 THEN PRINT AT T,0;"■"
150 NEXT T
160 FOR T=2 TO 18 STEP 2
170 FOR I=1 TO 21 STEP 2
180 PRINT AT T,I;"■"
190 NEXT I
200 NEXT T
210 FOR T=BT TO BB
220 PRINT AT T,31;"■"
230 NEXT T
240 PRINT AT 21,0;"SCORE:0  HI-Score:";HI
245 SLOW
250 FOR T=1 TO BALLS
260 LET X=30
265 LET Y=9
270 LET X1=-1
290 PRINT AT 21,24;"BALLS:";T
300 IF (INKEY# <> "Z") + (BB=19) THEN GOTO 350
310 PRINT AT BT,31;" "
320 LET BB=BB+1
330 LET BT=BT+1
340 PRINT AT BB,31;"■"
350 IF (INKEY# <> "S") + (BT=1) THEN GOTO 400
360 PRINT AT BB,31;" "
370 LET BB=BB-1
380 LET BT=BT-1
390 PRINT AT BT,31;"■"
405 IF X=1 THEN LET X1=1
410 LET X=X+X1
415 IF (Y=19)+(Y=1) THEN LET Y1=Y1*(-1)
420 LET Y=Y+Y1
425 LET B1=B
430 LET B=P + 33*Y + X
440 IF PEEK B <> 133 THEN GOTO 500
450 LET K=K+1
460 LET X1=X1*-1
470 PRINT AT 21,6;K
500 POKE B,CODE "0"
505 POKE B1,0
510 IF X=1 THEN LET X1=X1*-1
520 GOTO 600 - (X=30)*70
530 GOTO 1000 - (Y <= BB) * (Y >= BT) * 460
540 LET X1=-1
550 IF NOT (Y1>0) * (Y=BT) + (Y1<0) * (Y=BB) THEN GOTO 570
560 LET Y1=0
565 GOTO 580
570 IF Y1=0 THEN LET Y1=Y1 + (Y=BB) - (Y=BT)
598 GOTO 300
1000 PRINT AT Y,X;" "
1010 NEXT T
1020 PAUSE 200
1100 IF HI >= K THEN GOTO 1200
1110 POKE 16514,K
1120 SCROLL
1130 SCROLL
1140 PRINT "CONGRATULATIONS. NEW HI-SCORE"
1200 SCROLL
1210 SCROLL
1220 PRINT "DO YOU WANT TO PLAY AGAIN (Y/N)?"
1230 PAUSE 564
1240 IF INKEY#="Y" THEN RUN
1250 CLS

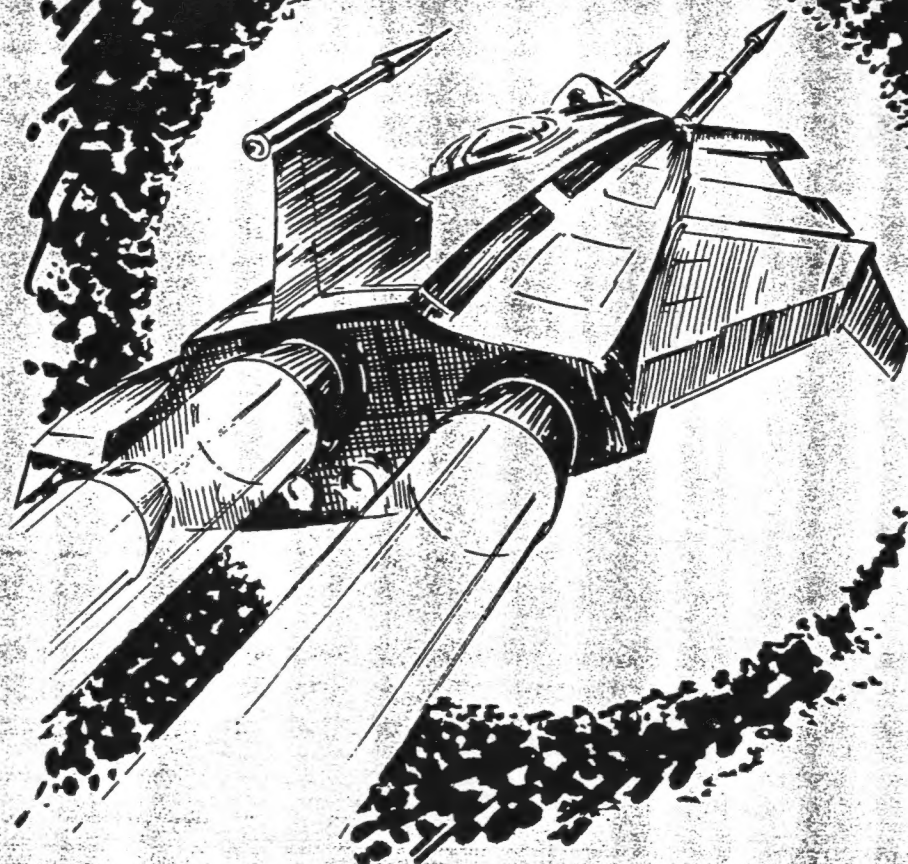
```



```

10 LET A=PI/PI
20 LET B=PI-PI
30 LET R=E
40 LET V=600
50 LET S=20
60 LET T=15
70 LET Y=15
80 CLS
90 LET X=INT (RND*25)
100 PRINT AT Y,X; "*"
110 PRINT AT S,T; "■"
120 PRINT AT S+A,T+A; "■"
130 LET V=V-A
140 IF INKEY$="Q" THEN LET T=T-A
150 IF INKEY$="P" THEN LET T=T+A
160 IF INKEY$="1" THEN LET S=S-A
170 IF T < B THEN LET S=S-A
180 IF T > 25 THEN LET T=25
190 IF V=B THEN GOTO 500
200 IF S=B THEN GOTO 350
210 IF T=X AND S=Y-A THEN GOTO 300
220 IF S=Y-A AND T <> X THEN GOTO 50
230 GOTO 110
300 LET Y=Y-5
310 GOTO 80
350 LET R=R+A
360 GOTO 50
500 CLS
510 PRINT AT 10,11; "GAME OVER"
520 PRINT AT 12,11;R

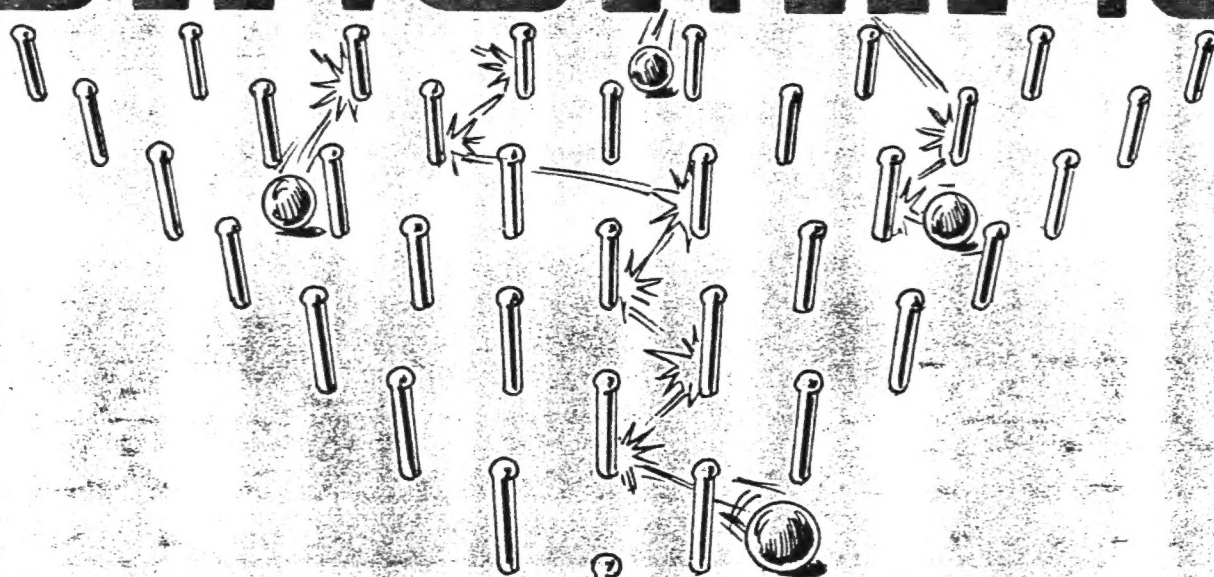
```



STAR GATES, (by D. E. Healey) is a 1K program in which the sun is about to go super nova. A fleet of space ships is waiting to depart from Earth to escape the holocaust. The object is to guide each ship through star gates.

The space ship is situated at the bottom of the screen and key 1 is used to move vertically upwards and keys Q and P to move left and right respectively.

BINOMIAL



DISTRIBUTION

BINOMIAL DISTRIBUTION might be the first of a new style of program. P.R. Scott, who submitted it, believes that there are many fundamental scientific principles which could profitably be illustrated on Timex Sinclair machines.

This program for the 16K T/S1000, ZX81 serves to illustrate

the principle of binomial distribution. The display shows a ball falling through a triangular matrix of pegs. When the ball hits one of the pegs it rebounds to the left or right, entirely* at random.

Its final position is recorded and a further ball produced. The distribution of final positions is the binomial distribution, familiar to

most mathematics seniors. You may not know that this characteristic pattern is also of importance in spectral intensities and polymer conformations.

An excellent program, likely to prove of immediate use to teachers and students of mathematics. Graphics notes: 120— Minus, Four spaces, minus and so on.

```

10 DIM A(7)
20 FOR X=1 TO 7
30 LET A(X)=0
40 NEXT X
50 PRINT AT 0,5;"BINOMIAL DISTRIBUTION"
60 PRINT AT 5,15; "■"
70 PRINT AT 7,14; "■ ■"
80 PRINT AT 9,13; "■ ■ ■"
90 PRINT AT 11,12; "■ ■ ■ ■"
100 PRINT AT 13,11; "■ ■ ■ ■ ■"
110 PRINT AT 15,10; "■ ■ ■ ■ ■ ■"
120 PRINT AT 17,9; "■ ■ ■ ■ ■ ■ ■"
130 PRINT AT 18,11; "■ ■ ■ ■ ■ ■ ■"
200 PRINT AT 3,15; "0"
210 LET X=15
220 LET Y=3
230 LET XP=X
240 GOSUB 400
250 IF Y=16 THEN GOTO 490

```

```

260 LET R=RND
270 IF R < 0.5 THEN LET X=X+1
280 IF R >= 0.5 THEN LET X=X-1
290 GOSUB 400
300 GOTO 230
400 PRINT AT Y,XP; " "
410 LET Y=Y+1
420 PRINT AT Y,X; "0"
430 RETURN
490 PRINT AT 16,X; " "
500 LET Z=(X-7)/2
510 LET A(Z)=A(Z)+1
520 LET P=17
530 IF Z/2=INT (Z/2) THEN LET P=18
540 LET Q=X
550 IF A(Z) >= 10 THEN LET Q=Q-1
560 PRINT AT P,Q; A(Z)
570 IF A(Z)=50 THEN INPUT Z
580 GOTO 200

```